

9 KPIs successful construction firms should monitor

By Sabine Hoover and Nick Schubert

The responsibility of managing growth and economic challenges requires leadership in contracting and subcontracting firms to devise a disciplined business strategy. This strategy must efficiently address potential opportunities and problems as they arise by providing reliable, timely information to support management decision-making. Monitoring KPIs should be a part of your disciplined business strategy.

Implementing unified, completely integrated (not just interfaced) software solutions enables construction firms to maintain the reliable, timely information necessary to generate key performance indicator (KPI) figures on demand.

A single, scalable software solution with a familiar user interface can integrate with existing software and provide rapid KPI updates using accurate, continually updated information from a central database. This functionality allows firms to be more proactive and dynamic in the long-term, without the need for continual software purchases and upgrades. Furthermore, scalable software solutions offer greater flexibility for growing companies without tying firms to a proprietary or custom software system, which may have only limited support and questionable compatibility with other applications.

Here are nine KPIs construction firms should monitor.

1. **Liquidity.** Determine how much cash your work in progress is generating or consuming by monitoring key current asset and liability balance sheet accounts.
2. **Cash flow.** Understand whether individual projects are generating or consuming cash so you can better identify execution problems on projects. Consistent attention to cash flow also helps to promote timely billing and collections.
3. **Labor productivity.** Labor productivity is particularly important for subcontractors because productivity problems can break labor budgets and erode profit margins. Managers can separate jobs within a project to identify discrepancies between actual labor expenditures and estimates. This information helps managers and field supervisors forecast cost-to-complete, establish daily performance goals, address current problems, and improve future estimating and bidding accuracy.
4. **Schedule variance.** Project owners demand clear communication regarding project progress and timely completion. Given increasingly complex project specifications and schedule compression, you must be able to identify and monitor schedule variance to deliver projects on a timeline that satisfies owners' demands. Understanding how factors cause schedule variance, such as change orders and weather, allows you to properly plan, communicate, and coordinate resources to ensure higher quality output, improved safety, and better resource utilization and allocation. Effectively managing schedule variance also helps construction firms maintain a competitive advantage against other firms that often fall behind schedule.
5. **Margin variance.** Compare your gross margins to business plan objectives by monitoring overall margin variance. Similarly, investigate the gross margins on particular projects, relative to the

project estimate, to determine whether the project is achieving expected profitability. Through constant attention to margin variance, management and field supervisors can make the corrective changes necessary to keep individual project margin variance to a minimum and the overall gross margin stable.

6. Unapproved change orders. Construction firms face an increasing economic threat from risk transfer provisions in standard contract types. Reduce your firm's financial exposure by identifying and diligently pursuing unapproved change orders.
7. Committed cost. With rising material prices and labor shortages, construction firms face financial exposure when suppliers and subcontractors are not yet committed contractually—particularly on longer-duration projects. It is imperative for your firm to track uncommitted costs to increase the proportion of committed costs where possible and, where necessary, to incorporate factors such as price escalation and contingent cost terms into their committed costs in order to limit financial exposure.
8. Backlog. Properly tracking backlog—and the expected gross margins on backlogged work—allows construction firms to avoid the problems associated with insufficient work and profit fade. With this knowledge, your firm can make strategically sound decisions about which projects to pursue.
9. Customer satisfaction/scorecard. To maintain competitive advantage, track your firm's ability to meet owner expectations by compiling and analyzing qualitative feedback. This retrospective examination of past projects identifies potential deficiencies, enabling your firm to address such issues in current and future projects.

Identifying potential strengths

When considered together, KPIs help to identify potential strengths that allow firms to capitalize on opportunities available during strong demand and potential problems that may be detrimental to their businesses. However, dated KPIs only provide historical information that can be largely inconsequential for present assessment or, worse still, inaccurate or incongruent information that is misleading to decision-makers. Disparate or interfaced software systems from different manufacturers may require firms to undertake laborious data manipulation to compile KPIs, and data transfer between different software systems could result in mistakes and inaccurate KPI calculations.

Construction firms that implement software solutions that enable them to monitor KPIs help them maintain financial discipline and make the necessary adjustments to comply with their strategic business plan. Through this type of disciplined management, your firm can act rapidly in pursuing opportunities or solving problems on projects because you'll have an accurate understanding of your past performance, present needs, and the steps that you must take to ensure future success.

Authors

Sabine Hoover

Sabine is the team leader for FMI's Denver Research Group and is based in Denver, Colorado. She has more than seven years of research experience and is responsible for designing, managing, and

conducting research projects for a wide range of stakeholders. Such research projects typically range from small, custom research requests to large, comprehensive market assessments that help clients in their strategic planning or business development efforts.

Nick Schubert

Nick works in FMI's Denver Research Group and is based in Denver, Colorado. He currently supports the Denver Research Group's team leader on a variety of project types and sizes, from small, custom research requests to large, comprehensive market assessments. In addition, Nick recently finished his JD at the University of Denver College of Law, and he has been awarded the 2006 Roberta Steinhardt Ehrlich Award for Excellence for his work in mediation.